

## Claims

- [c1] An interface unit comprising:  
a data transfer unit includes  
a processor bus interface coupled to a processor bus, the processor bus interface includes a processor buffer,  
an ISDN bus interface coupled to an ISDN-based bus, the ISDN bus interface includes an ISDN buffer, and  
a control unit coupled to the data transfer unit for controlling the transfer of data between the processor bus and ISDN-based bus.
- [c2] The interface unit of claim 1 wherein said processor bus interface is coupled to the ISDN-based bus interface via an interface buffer comprising a group of register banks, said group of register banks having a control input terminal.
- [c3] The interface unit of claim 2 wherein the control unit further comprises a register bank control unit coupled to the interface buffer for controlling the group of register banks.
- [c4] The interface unit of claim 1 wherein the ISDN buffer comprises at least one shift register for parallel/serial data conversion.
- [c5] The interface unit of claim 1 wherein the processor bus interconnects a central processing unit, a memory unit and peripheral devices.
- [c6] The interface unit of claim 5 wherein the ISDN-based bus comprises an ISDN-oriented modular bus for coupling to voice, data and/or video devices.
- [c7] The interface unit of claim 1 wherein said processor bus is connected to a high-speed data transfer unit.
- [c8] The interface unit of claim 7 wherein the high-speed data transfer unit is a Universal Serial Bus.